EETT Grant Competition 2005-2006 Application

FORM 1 - Cover Sheet

Grant Category: (Please select one.)
X_____Professional Development for Student Achievement
_____Technical Support for Student Achievement Initiatives

Grant amount requested: $ 606,300.00

LEA participants and percentage of money to be received from the grant:

LEA (District)	Contact Name	Contact E-mail	% to be received
Beaver	Tracy Davis	tracy.davis@m.beaver.k12.ut.us	20%
Iron	Ken Munford	ken.munford@iron.k12.ut.us	27%
Kane	Jim Glover	jglover@m.kane.k12.ut.us	23%
Washington	Charlie Roberts	croberts@wash.k12.ut.us	30%

Other partners and percentage of money to be received from the grant:

Other Partners	Contact Name	Contact E-mail	% to be received
McREL	Howard Pitler	hpitler@mcrel.org	100 %
SEDC	Melanie Durfee	melanie.durfee@m.sedc.k12.ut.us	0 %
SUU	Tony Pellegrini	pellegrini@suu.edu	0 %
USOE	Kathy Webb	webb_k@suu.edu	0 %

Note: percentages should total 100%

Percent of requested funds designated for professional development:
25____%

Assurance that indirect costs (if taken from grant award) will conform to regulations: (Please select one.)
X_____YES
_____NO

Assurance that all LEAs receiving funds from this grant have a substantial need for assistance in acquiring and using technology as demonstrated by their agreement to not transfer any formula Title II Part D funds out of their district's Title II Part D budget: (Please select one.)
x_____YES
_____NO

Fiscal LEA Superintendent signature:

_____

Project/Grant Manager signature:

_____

FORM 2 - Project Summary Four school districts in southwest Utah (Beaver, Iron, Kane and Washington) propose to **partner** with Southwest Educational Development Center (SEDC), Mid-continental Research Education Laboratory (McREL) and Southern Utah University (SUU) to participate in Research 2 Results eCampus (R2R) which allows eight schools over two years (Beaver High School, Diamond Valley Elementary, Dixie Downs Elementary, Fiddlers Canyon Elementary, Kanab High, Milford High, Parowan High, and Valley High) to receive enough staff development and technology to significantly increase students' writing skills. Each school will receive enough computers to create a three-to-one, computer-to-student ratio. Each computer will have the Microsoft Office Suite as well as the mind-mapping software program *Kidspiration* or *Inspiration*. In addition, each classroom will have an LCD projector mounted to the ceiling. The staff development model will follow McREL's program, R2R which features Marzano's *Classroom Instruction that Works* and an intensive technology administrative leadership component.

The goal of R2R is to improve all students' writing skills and knowledge through the integration of technology and research-based instructional strategies. The grant plans to accomplish this through the following objectives:

- Increase the percentage of students achieving proficiency in writing skills as measured by UPASS assessments such as CRT and Tenth-Grade Competency Tests.
- At least 80% of classroom teachers will increase effective technology integration and Six+1 Trait ™ concepts across the disciplines as measured by pre-and post-surveys, principal observations and online reflections
- At least 80% of teachers will increase their utilization of researched-based instruction strategies (from *Classroom Instruction that Works*) into the language arts curriculum as measured by pre- and post-surveys, principal observations and online reflections.

Schoolwide Reform Summary. The success of R2R rests on several key components. One of them is that the project addresses schoolwide reform, as opposed to interventions with isolated educators, independent of others receiving the same intervention. All teachers in the eight participating schools will receive the same professional development instruction, the same technology equipment, the same collaboration opportunities and have the same accountability as the other teachers in their schools. In addition, the building administrator at each school will receive the same instruction that each teacher receives as well as intense, research-based guidance created specifically for building administrators. Each participating principal is required to collect data on each of the teachers at his school on a weekly basis as to what teaching strategies the teachers are deploying in their classrooms. In addition, the building administrators will be required to meet with McREL mentors on a monthly basis to discuss the successes and challenges that face a school under change.

Summary of Research-Proven Instructional Strategies. At the core of R2R is *Classroom Instruction that Works*. These are the nine (see Appendix D) researched-based instructional strategies that educators will learn and have the opportunity to practice over and over again. They include identifying similarities and differences, summarizing and note taking, reinforcing effort and providing recognition, homework and practice, nonlinguistic representations, cooperative learning, setting objectives and providing feedback, generating and testing hypotheses, and question cues and advance organizers. The research in *Classroom Instruction that Works* (Marzano 2001) shows that if instructors use any or all of these nine specific instructional strategies, properly mastered, students' achievement will increase. All teachers at participating schools will be given a two-day introduction to these nine strategies. Each teacher will then receive a full day's training on how technology could be used to enhance these strategies. Later, the teachers will attend a two-day training in which they practice integrating the teaching strategies with technology and the Six+1 Trait ™ writing assessment. At the end of this five-day training, each teacher will choose two or three of the classroom strategies to perfect throughout the school year. As the teachers collaborate with each other and with the McREL mentors throughout the year, they will report on the successes and challenges they encounter as they improve their teaching habits and style.

Summary of Technology Integration. As mentioned previously, each teacher will receive one day's training on technology integration with *Classroom Instruction that Works*. Obviously, that is not enough time to master educational technology. In addition, all teachers bring with them varied levels of technology skills and comfort, not to mention the new equipment and software that will require additional training. Therefore, each district technology department is committed to helping train the teachers on their new equipment. Also, at each school is at least one teacher who is skilled in technology integration to help the struggling teachers. In

addition, SEDC will provide monthly (more if needed) technology trainings to help the teachers master the new technologies placed in their schools and in their classrooms.

Summary of Use of Data-driven Decisions. All educators at the participating schools have access to the disaggregated CRT data of their students. Each teacher can see how their incoming students scored, objective by objective, on their last CRT. The teachers in the secondary schools have access to the disaggregated data of the Tenth-Grade Competency Tests. This information will help the teachers decide which teaching strategies to emphasize throughout the coming year.

Correlation of Goals with EETT Competition. The goals of this grant proposal correlate closely with the goals of this EETT grant competition. One goal of the EETT competition is to improve student achievement through the use of technology in elementary and secondary schools. R2R proposes to accomplish this by targeting writing skills of students in eight schools, five of them secondary and three elementary. Another goal of the EETT grant competition is to assist every student regardless of race, ethnicity, income, geographical location or disability. R2R promises that all students in all participating schools will have access to the technology intervention regardless of race, ethnicity, income, geographical location or disability. The EETT goals state that all students will become technologically literate and teachers will incorporate effective integration of technology resources and systems. This will happen naturally in R2R as the teachers receive the technology equipment in their classrooms and begin to implement the strategies they are learning to master. Lastly, the EETT goals want to see integration with professional development and curriculum development to promote research-based instructional methods that can be widely replicated. R2R intervention has proven that it can be widely replicated because it already has been. McREL has several years' experience and success working with teachers, administrators and staff developers with this very same program.

Timeline Summary.

April-May 2005. After notification of funding, year-one schools (Dixie Downs Elementary, Kanab High, Milford High and Parowan High) order equipment and make any alterations to building networks so they may support additional equipment.

July 2005. Install equipment and software in year-one schools.

July 18-22, 2005 McREL personnel train R2R grant cohort in Cedar City. The cohort consists of three staff developers per year-one school, one experienced in teaching strategies the other experienced with technology integration, and the third is the building administrator. The five-day training concentrates on: *Classroom Instruction that Works*, technology integration, and Six+1 Trait ™ integration.

July-August 2005. Cohort members train teachers at each year-one school. At this training, teachers at participating schools will study their incoming students' CRT and tenth-grade competency scores to determine specific needs.

August 2005. Baseline data is collected at year-one schools, including a survey of administrators' technological savvy and perceptions of the degree to which they implement various leadership practices as well as surveys of teachers' instructional practices, technological savvy, perceptions of teaching efficacy, motivation for teaching, and principal leadership.

August through May 2006. Teachers at year-one schools participate in bi- monthly 60-minute online video conference classes for teachers and administrators using *Classroom Instruction that Works*. Teachers participate in live online chat room for informal synchronous teacher discussions. Building administrators participate in monthly 60-minute online video-conference classes and discussions. Building administrators collect data on the classroom strategies the teachers are using at individual schools. Asynchronous threaded online teacher discussions are available in response to facilitator prompts. SEDC and district personnel will offer regular technology trainings.

June 2006-More data is collected, student CRT and tenth-grade competency scores are reviewed, and independent evaluators receive all year-one data.

April-May 2007. Year-two schools (Beaver High, Diamond Valley Elementary, Fiddlers Canyon Elementary, and Valley High) follow a similar program as year-one schools, drawing on the expertise of the year-one cohort, teachers, and building administrators.

FORM 3 - Project Detail

Need: in the past few years changes to education have put many schools in need. The dynamic nature of teaching with technology demands constant staff development; technologies are changing so quickly that teachers struggle to stay ahead of their students. In addition, Federal and state mandates require that teachers are held accountable for their students' test scores more than ever before. Student achievement data is easily accessible not only to schools, but also to parents and other stakeholders. The general feeling of educators is one of being overwhelmed and, at times, hopeless. Teachers feel the need to teach more curriculum and do it more quickly than ever before. The R2R proposal offers remedies to many of the frustrations that schools face.

The R2R offers help for teachers by providing research-based successful instructional strategies which target technology and writing skills. When students don't learn what a teacher teaches, it is the teacher's responsibility to re-teach, preferably with a different strategy. Too many teachers re-teach using the same method, holding their student or their parents responsible for the student's inability to grasp the material. Classroom Instruction that Works offers nine research-based strategies from which the teacher may choose. Technology is specifically integrated into these strategies helping to engage and deepen the understanding for the student. For example, one of the strategies involves cooperative learning. The process of guiding students to worki in a group to research a problem on the Internet and then create a multi-media project to demonstrate understanding is one such strategy a teacher might employ. These strategies give teachers guidance as to how to teach a student who does not learn the curriculum easily. Many successful teachers rely on their high energy and wit to teach their students. This works for some teachers, but others, with the increase of accountability to teach all objectives listed in the curriculum, are starting to feel discouraged. Their previous methods of teaching require too much personal effort in today's classrooms. These teachers need to be instructed in more efficient (time and energy) methods of teaching. They need to study research-based instructional methods that will help the student learn better with less force expended by them. They need to learn a variety of teaching methods so that they can easily adapt to successfully teach each student they are assigned to teach.

R2R also offers to include building administrators in the process of teaching. In light of recent changes, many principals do not feel they have the time to learn, let alone implement, new leadership skills that will help their teachers adapt to the changing climate. Many principals are so focused on pressing conflicts, that they do not have a chance to regularly visit classrooms, to see first hand how the teachers are teaching and the students are learning. As a result, much of the information the principals currently receive is second-hand, from teachers or parents visiting them in their offices, away from the classroom. R2R will give administrators both the time and the tools to address school issues. It will put the principal back in the position to systematically and fairly recognize accomplishments of teachers and staff. It will put the principals back as the instructional leaders the schools. It will help them protect instructional time from interruptions and protect and shelter teachers from distractions.

Although many schools would benefit from the R2R program, the schools mentioned in this proposal are in particular want because they have a compelling need for improved technology professional development, student achievement, technical support, and network infrastructure. For example, Dixie Downs Elementary has a poverty rate such that 60% of its students are eligible for free/reduced lunch. In addition, there is a school mobility rate of 33%. Schools such as Beaver High, Milford High and Parowan High have sufficient computers for the students to use; however, the teachers have had very little training in research-based technology integration. Much of the time the students spend with computers is not related to the core curriculum because the teachers do not know how to use the computers to teach effectively. The remoteness of Valley High in Orderville, Utah, precludes it from providing some services to their students. High-speed Internet is not possible for students at their homes--the only high-speed access they have is at school. During the winter when some roads are impassable, it is a two-hour drive to a town that contains any electronics including computer parts. Currently, the inferior infrastructure at Kanab High requires that all students save and have access to the same folder on the server. This means that all the students have access to each other's projects. Basically, they are on the honor system to respect the privacy of their fellow students. As a result, many of the teachers are reluctant and thus unskilled in assigning technology-based projects. Kanab High has plans to reconfigure its network to solve these problems, but the teachers won't have the skills to utilize their new technologies unless they receive some high-quality, research-based technology staff development.

Research-base: All three components of this grant deliver high quality research: the actual teaching strategies (*Classroom Instruction that Works*) that the teachers will implement, the emphasis on administrative leadership (Balanced Leadership), and the method of delivering the staff development (Rural Technology Initiative). The independent research associated with all three of these components projects a strong likelihood that the interventions proposed in this grant will positively impact student performance. In addition, the implementation plans match the models.

Classroom Instruction that Works. In 1988, McREL began to conduct a meta-analysis to identify "instructional strategies that have a high probability of enhancing student achievement for all students in all subject areas at all grade levels" (Marzano 1998). The study concluded that nine instructional strategies significantly lead to student gains. These nine strategies with their accompanying percentile gain are listed in Appendix D as FIGURE 1.

Balanced Leadership. The Balanced Leadership framework is based on findings from two separate studies conducted by McREL, a meta-analysis and a factor analysis (Waters 2003). Key findings include that principal leadership is significantly correlated with student achievement, and that 21 specific leadership responsibilities with 66 associated practices have statistically significant relationships. A list of these responsibilities and practices can be found in the Appendix E as FIGURE 2.

Rural Technology Initiative. The Rural Technology Initiative (RTI) was developed by McREL to evaluate the efficacy of a model for online collaborative learning among rural teachers and administrators. On a preliminary survey in May 2004, administrators in the treatment group perceived RTI leadership materials and content to be of high quality and perceived that teachers were increasing their understanding of instructional strategies. The RTI intervention will be implemented from March 2004 through May 2005 (Pitler 2004). The research design method and data collection are contained in Appendix F.

Professional Development. The R2R program addresses all Utah Staff Development Guidelines for context, process, and content:

Context. Learning Communities are created both at the school and regional level. Teachers can collaborate in person with colleagues at their own physical location as well as participate in online threaded asynchronous discussions with other educators. Leadership is cultivated as a result of the active participation of the building administrators. Among other duties, the principal is expected to attend all trainings, collect data on a weekly basis and participate in monthly video conferencing with McREL staff developers. Resources (including money and time) that support adult learning have been allocated. Such resources include, paid teacher work days, instructional trainings from McREL, technology training from SEDC, video conferencing units from central district offices to enable remote conferencing, and additional technologies for the classrooms.

Process. Before any training begins, educators will review their previous students' scores as well as their incoming student scores on end-of-level exams. Staff at SEDC will facilitate the disaggregating of data for the teachers to evaluate their students' performance. Teachers will then make data-driven decisions when deciding which teaching strategies they will emphasize during their instructional learning experience and eventual re-design of their curricula. The project will provide educators with the knowledge and skills to collaborate as they gain knowledge, skills and new attitudes. The project also addresses the phases of the change process as the teachers evolve to participate in a new organizational system.

Content. Through applying data-driven decisions and researched-based instructional techniques, this project prepares educators to know the academic status of all students so they may equitably hold high expectations for students' academic achievement. In doing so, it addresses diversity in instructional techniques so that teachers may adapt their teaching strategies to both the student as well as the subject area. The newly-learned instructional strategies also enable educators to provide developmentally appropriate curricula that engages students in several ways of thinking and learning.

R2R is also clearly aligned with district professional development activities:

Beaver District (Milford High and Beaver High)
District goals that target the areas of highest need are:

- All students achieve competency in reading, writing and math
- Integration of the Six+1 Trait ™ program into all curricular areas
- Teachers will use research-based developments to teach core objectives
- Teachers integrate technology into their daily teaching practices

Each of these goals will be addressed with the R2R program. The teaching strategies in which the teachers will be trained are **researched-based** and integrated with the ***Six+1 Trait*** **™ program** in a **technology-rich** environment. In addition, the R2R program has been proven to **improve student performance.**

Iron District (Parowan High and Fiddlers Canyon Elementary)
District goals that target the areas of highest need are:

- All teachers will increase awareness, knowledge, and implementation of research-based developments in curriculum and methodology
- All teachers will integrate the *Six+1 Trait* ™ program with their content
- Improve student performance by 3%-5% in language arts and math as measured by the annual end-of-level tests
- Establish a climate that reflects respect, a strong work ethic, and positive attitudes throughout the school as measured by annual surveys

Each of these goals will be addressed within the R2R program. The teaching strategies in which the teachers will be trained are **researched-based** and integrated with the ***Six+1 Trait*** **™ program** in a technology-rich environment. In addition, the R2R program has been proven to **improve student performance.**

Kane District (Kanab High and Valley High)
District goals that target the areas of highest need are:

- Demonstrating competency on school and standardized tests, specifically writing scores
- Increasing overall score percentages by at least four percent yearly
- Using research-based developments to teach core objectives
- Integration of the Six+1 Trait ™ writing rubric into all content areas
- Utilization of COGNOS test data information system to disaggregate data, informing all teachers of student success and needs
- Achieving effective and meaningful collaboration among teachers, students, parents, and all stakeholders
- Incorporating technology into instruction to improve student writing skills and knowledge to achieve a high level of success (which is tantamount to student growth)

Each of these goals will be addressed with the R2R program. The teaching strategies in which the teachers will be trained are **researched-based** and integrated with the ***Six+1 Trait*** **™ program** in a **technology-rich** environment. The **data** disaggregated by the software COGNOS will **drive** instructional **decisions**. In addition, the R2R program has been proven to **improve student performance.**

Washington District (Dixie Downs Elementary and Diamond Valley Elementary)
District goals that target areas of highest need are:

- Teach writing daily using Six+1 Trait ™ writing assessment
- Carefully plan and implement varied instructional approaches including technology to support small group, whole class, individual work, etc., in reading and writing
- Continue to improve reading and writing by cooperative structures with technology in teaching reading and writing
- Integrate science and social studies with language arts through various Internet sites on a regular basis
- Use various Internet sites for shared reading instruction of non-fiction
- Increase knowledge of research-based instruction by incorporating *Classroom Instruction that Works* into weekly teaching student groups.

Each of these goals will be addressed with the R2R program. The teaching strategies in which the teachers will be trained are **researched-based** and integrated with the **6** ***Six+1 Trait*** **™ program** in a **technology-rich** environment. In addition, the R2R program has been proven to **improve student performance.**

Action plan:
January 2005. Districts collaborate by identifying participating schools and staff developers to participate in the R2R grant. In addition, they collaborate with each other and the grant partners to write the grant.

March-May 2005. After notification of funding, year-one schools (Dixie Downs Elementary, Kanab High, Milford High and Parowan High) order equipment and make any alterations to building networks so they may support additional equipment. At this time, the districts will also choose the cohort that will train the teachers at the year-one schools. Each school will have three staff developers, one skilled in teaching strategies, one experienced in technology integration and the other will be the building administrator. Each member of this cohort will receive a laptop compatible with the equipment at his or her school to help complete the R2R project.

Dixie Downs Elementary School plans to purchase and install:

- 24 teacher Sony VPLCX20 ceiling-mount projectors at $1843.00 for a total of $44,232.00. This provides a projector for every teacher in the school. These projectors will be connected to the teachers' current classroom computers and will be used to present student projects and classroom instruction.
- 50 Sony Vaio VGNA230 Notebook Computers with *Microsoft Office* and *Kidspriation* at $1,600.00 each for a total of $80,000.00. This will provide the elementary school with a portable lab for easy access to all classrooms and sharing for all students.
- Two computer carts with wireless access points which allow the notebook computers to be moved easily from classroom to classroom at $4,495.00 a piece for a total of $8,990.00.
- Three laptop computers with MS Office and *Kidspiration* installed for the school trainers and principal at $1,600.00 each for a total of $4,800.00
- One Tungsten E handheld computer for $199 to aid the principal as he collects classroom data.

Kanab High School plans to purchase and install:

- 24 teacher Sony VPLCX20 ceiling mount projectors at $1843.00 for a total of $44,232.00. This will provide a projector for every classroom.
- 24 Sony Vaio VGNA230 Notebook Computers with *Microsoft Office* and *Inspiration* at $1,600.00 each for a total of $38,400.00. This will provide Kanab High School Teachers with a high quality notebook computer that they can use anytime and any place to develop technology infused lesson plans. (The two trainers at the school will receive a notebook a computer from the 24 purchased.)
- 18 Student Desktop computers at $465 each to be added to the current lab of computers for student access. The cost of the lab update will be $8370.00. This will allow an entire class to have access to a computer when they attend the lab.
- One Hewlett Packard printer in the lab at $1,500.00 for printing student projects
- One Tungsten E handheld computer for $199 to aid the principal as he collects classroom data.

Milford High School plans to purchase and install:

- Two Cisco 2948 layer two switches for $2500.00 each and one Cisco 3750 layer three switch for $7000.00. Total cost for the switches are $12,000.00 (The network infrastructure will be re-designed and installed to support this project at Milford)
- 12 teacher Sony VPLCX20 Ceiling mount projectors at $1843.00 for a total of $22,116.00. These projectors will be connected to the teachers' current classroom computers and will be used to present student projects and classroom instruction.
- One Hewlett Packard printer at $1,500.00 to print student projects.
- 25 Sony Vaio VGNA230 Notebook Computers at $1,600.00 each for a total of $40,000.00. This will provide Milford High School with portable computers to all classrooms.
- Two laptops for the school trainers at $1,600.00 each for a total of $3,200.00.
- Purchase and install 12 Wireless Access Points throughout the school. The cost for the12 Cisco 1200 Access Points are $550.00 each for a total of $6600.00. (This will enable students will to use the notebook computers in all rooms and throughout the building.)
- One Tungsten E handheld computer for $199 to aid the principal as he collects classroom data.

Parowan High School plans to purchase and install:

- One Cisco 2948 layer two switch for $2500.00, category 5e cabling, raceway, patch panels and RJ 45 ends for $400.00, and electrical upgrade for the computer lab room at $3,500.00. (The network infrastructure for the lab will be installed to support this project).
- 34 eMac 1.25 Ghz student lab computers at $816.00 each for a total of $27,744.00.
- One Hewlett Packard printer at $1,500.00 to print student projects. Purchase *Microsoft Office* and *Inspiration* software for the lab computers for a total of $2801.60
- 25 teachers Sony VPLCX20 Ceiling mount projectors at $1843.00 for a total of $46,075.00.
- 25 eMac 1.25Ghz teacher computers at $816.00 for a total of $20,400.00. The projectors will be connected to the teachers' computers and will be used to present student projects and classroom instruction.
- Two iBook G4 super drive laptops with *Microsoft Office* and *Inspiration* installed for the school trainers at $1,586.00 each for a total of $3,172.00
- One Tungsten E handheld computer for $199 to aid the principal as he collects classroom data.

July 2005. Districts install equipment and software in year-one participating schools.

July 18-22, 2005. McREL personnel will train the R2R grant cohort in Cedar City at the Iron District Offices in the Board Meeting Room. The five-day training concentrates on: *Classroom Instruction that Works*, technology integration, and Six+1 Trait ™ integration.

July-August 2005. Cohort members train teachers at each year-one school. At this training, teachers at will study their incoming students' CRT scores to determine specific needs. The first two days will be an introduction to *Classroom Instruction that Works.* The course will give examples of how to use these strategies in all subject areas and in all K-12 grade levels. The third day will consist of training on how to integrate technology into the nine strategies. Examples include creating technology projects such as newsletters and multimedia presentations as well as the mind-mapping software *Inspiration*. In addition, the members of the cohort will train on how to use the video equipment and online tools that will be necessary for the collaboration throughout the school year. On the final two days, specific applications of the teaching strategies will be shown in the writing process context, in particular, how the nine teaching strategies work with the writing process as well as the Six+1 Trait ™ evaluation process.

August 2005. Baseline data is collected at year-one schools, including a survey of administrators' technological savvy and perceptions of the degree to which they implement various leadership practices (see Appendix G) as well as surveys of teachers' instructional practices, technological savvy, perceptions of teaching efficacy, motivation for teaching, and principal leadership (see Appendix H).

August through May 2006. Now that teachers at participation schools have the initial training, they will need support and encouragement. Specifically, they will receive:
- Day-to-day mentoring with their on-site staff developers (members of the cohort trained by McREL personnel)
- Monthly technology trainings from SEDC
- Asynchronous threaded online teacher discussions
- Chat room for informal synchronous teacher discussions
- Bi-monthly video conferencing with McREL trainer/mentors

During the school year, as the teachers and administrators implement R2R at their school, the following data will be collected:
- Surveys and interviews of treatment teachers and administrators on school environment and teacher professional community (see Appendix I)
- Documentation of teachers' and administrators' participation in R2R professional development activities
- Content of online teacher discussions
- Classroom observations of instructional practice
- Teacher retention data

- Student achievement data
- Weekly observations by each building administrator to each classroom in his school

May 2006. In May, at the end of school, the following surveys will be collected:

- Post-surveys of teachers' instructional practices, technological savvy, perceptions of teaching efficacy, motivation for teaching, and principal leadership (see Appendix G)
- Post-surveys of administrators' technological savvy and perceptions of the degree to which they implement various leadership practices (see Appendix H)

April-June 2006. Year-two schools (Beaver High, Diamond Valley Elementary, Fiddlers Canyon Elementary, and Valley High) order equipment and make any alterations to building networks so they may support additional equipment. For more detail on the year two budget, see Appendix I and the year two budget sheet accompanying this grant.

June 2006. Evaluation materials on year-one schools are submitted to independent evaluators hired by USOE. Student CRT and Tenth-Grade Competency Tests scores of year-one schools are compared with those students who did not receive the intervention.

Partnerships

Three rural districts and one urban district will collaborate on this project. Beaver, Iron, Kane and Washington School Districts will partner together to implement R2R.

Eight participating schools in southwest Utah, Beaver High, Diamond Valley Elementary, Dixie Downs Elementary, Fiddlers Canyon Elementary, Kanab High, Milford High, Parowan High, and Valley High will partner to implement R2R.

McREL will provide cohort training as well as follow up training throughout the year.

SEDC will be the grant administrator as well as give training, staff development consultation and technical support to the eight participating schools. SEDC will also assist with any network reconfiguration necessary to prepare the schools for the additional computers.

SUU will provide graduate level credit to teachers for participation in this grant project.

Please complete the budget distribution table, the narrative, and a separate USOE Budget form.
BUDGET DISTRIBUTION TABLE – Do not include the amounts expected from this grant.

Year One

LEA	EETT formula funds	Other NCLB funds	LEA matching funds	Other matching funds	LEA in-kind match
Beaver	$	$	$ 5,400.00	$	$ 78,696.00
Iron			$ 11,250.00		$ 66,229.00
Kane			$ 28,158.00		$ 51,475.00
Washington			$ 41,283.00		$ 105,384.00

Year Two

LEA	EETT formula funds	Other NCLB funds	LEA matching funds	Other matching funds	LEA in-kind match
Beaver	$	$	$ 3,780.00	$	$ 55,087.20
Iron			$ 7,875.00		$ 46,360.30
Kane			$ 19,710.60		$ 36,032.50

Budget Narrative Year One. Each individual school in the grant has specific needs for implementing this project. A school's size, existing technology, use and rural location dictate specific needs. As a result, the equipment purchased for each school will differ from the others. The budget is broken down by each school and includes in-kind matching funds. Each school is purchasing enough hardware so that it has a three-to-one student-to-computer ratio and a projector in every room. Several schools do not currently have the infrastructure to support the additional computers. The cost of switches is included in the grant proposal. These technologies are needed to integrate technology and the instructional strategies with the Six+1 Trait ™ writing program. Each of these purchases are necessary to support the R2R project which effectively integrates technology into the curriculum and increases students' access to technology as well as their overall achievement.

Milford High School-Beaver District EETT Grant Funds will purchase and install two Cisco 2948 layer two switches for $2500.00, one Cisco 3750 layer three switch for $7000.00, 12 teacher Sony VPLCX20 ceiling mount projectors at $1843.00 for a total of $22,116.00, one Hewlett Packard printer at $1,500.00, 25 Sony Vaio VGNA230 Notebook Computers at $1,600.00 each for a total of $40,000.00, two laptops for the school trainers at $1,600.00 each for a total of $3,200.00, and 12 Wireless Access Points throughout the school for a total of $6600.00. **Total of requested EETT Grant funds for Milford High School: $85,416.00.** Milford High School-Beaver District plans to match funds by providing 52 existing teacher computers and lab machines at $875.00 each for a total of $45,500.00, furniture for computers labs for a total of $8000.00, technology support and installation of the student labs throughout the school year for $4,000.00, installation of the wiring for the schools Local Area Network for a total of $7000.00, custodial support which includes power, heating, cooling and janitorial support for the computer lab for a total cost of $2000.00, time and/or reimbursement for the teachers and principal professional, 2 hours of professional development a month for 9 months for teachers at $25.00 per hours for a total of $5,400.00, and a PolyCom video conferencing unit for the monthly collaboration training for a total cost of $3,500.00. **Total matching funds for Milford High School*:* $84,096.00**

Parowan High School-Iron District EETT Grant Funds will purchase and install one Cisco 2948 layer two switch for $2500.00, category 5e cabling, raceway, patch panels and RJ 45 ends for $400.00, electrical upgrade for the computer lab room at $3,500.00, 34 eMac 1.25 Ghz student lab computers at $816.00 each for a total of $27,744.00, one Hewlett Packard printer at $1,500.00 , *Microsoft Office* and *Inspiration* software for the lab computers for a total of $2801.60, 25 teacher Sony VPLCX20 ceiling mount projectors at $1843.00 for a total of $46,075.00, 25 eMac 1.25Ghz teacher computers at $816.00 for a total of $20,400.00, two iBook G4 super drive laptops with *Microsoft Office* and *Inspiration* installed for the school trainers at $1,586.00 each for a total of $3,172.00. **Total of requested EETT Grant funds for Parowan High School: $108,092.60.** Parowan High School-Iron District plans to match funds by providing, furniture for computers labs for a total of $5,075.00, technology support and installation of the student labs, projectors and teacher computers throughout the school year at $10,500, custodial support for the lab for a total cost of $2100.00, room for the computer lab measuring 1050 square feet at $2.50 per foot per month for 10 months for a total of $26,250.00, time and/or reimbursement for the teacher and principal professional development, 2 hours of professional development a month for 9 months at $25.00 per hour for a total of $11,250.00, and a PolyCom video conferencing unit for the monthly collaboration training for a total cost of $3,500.00. **Total matching funds for Parowan High School: $77,479.00**

Dixie Downs Elementary School-Washington District EETT Grant Funds will purchase and install 24 teacher Sony VPLCX20 ceiling-mount projectors at $1843.00 for a total of $44,232.00, 50 Sony Vaio VGNA230 Notebook Computers with *Microsoft Office* and *Kidspriation* at $1,600.00 each for a total of $80,000.00, .two computer carts with wireless access points which allow the notebook computers to be moved easily from classroom to classroom at $4,495.00 a piece for a total of $8,990.00, three laptop computers with MS Office and *Kidspiration* installed for the school trainers and principal at $1,600.00 each for a total of $4,800.00. **Total of requested EETT Grant funds for Dixie Downs Elementary School: $138,022.00.** Dixie Downs Elementary School-Washington District plans to match funds by providing, 25 Teacher Computers at $875.00 for a total of $22,500.00, technology support and installation for the mobile labs throughout the school year $7,000.00, installation of the wiring for the schools Local Area Network for a total of $13,840.00, custodial support for the mobile lab for a total cost of $2000.00 for the year, time and/or reimbursement for the teacher and principal professional development. This includes 52 hours for the 24 teachers at $41.70 per hour and 94 hours for the principal at $41.70 per hour for a total of $56,550.78. Also, the district will dedicate a full-time person to provide hands-on professional development in the school for the

year at a cost of $41,283.00, and a PolyCom video conferencing unit for the monthly collaboration training for a total cost of $3,500.00. **Total matching funds for Dixie Downs Elementary School: $146,667.00**

Kanab High School-Kane District EETT Grant Funds will purchase and install 24 teacher Sony VPLCX20 ceiling mount projectors at $1843.00 for a total of $44,232.00, 24 Sony Vaio VGNA230 Notebook Computers with *Microsoft Office* and *Inspiration* at $1,600.00 each for a total of $38,400.00, 18 student desktop computers at $465 each to be added to the current lab of computers for student access ($8370.00), and one Hewlett Packard printer in the lab at $1,500. **Total of requested EETT Grant funds for Kanab High School: $92,502.00**. Kanab High School-Kane District plans to match funds by providing a network infrastructure re-design at a cost of $20,000.00, wiring for the schools Local Area Network, this includes the category 6 wiring, faces plates, and patch panels for a cost of $7,000.00, 15 Lab Machines at $465.00 each for a total of $6,975.00, furniture for computers labs for a total of $8000.00, technology support and installation of the student labs throughout the school year at $4,000.00, custodial support for the lab for a total cost of $2000.00 for the year, time and/or reimbursement for the teacher and principal professional development at $14,112 plus 23% for benefits that total $3246.00 for the quality days, 2 hours of professional development a month for 9 months at $25.00 per hours for a total of $108,00.00 (total for teacher professional development is $28,158.00), and a PolyCom video conferencing unit for the monthly collaboration training for a total cost of $3500.00. **Total Matching funds for Kanab High School: $79.633.00**

Each building administrator will receive a Tungsten E handheld computer (4 @ 199) to help in data collection of the teachers as they implement the new teaching strategies. **This will cost the grant $796.00.**

Mid-Continent Research for Education and Learning (McREL) EETT Grant Funds. McREL will provide personnel wages, travel, data collection instruments, web resources for NCREL to provide training for five days on site and the follow-up training and support for the teachers and principals through out the year. The total cost is **$87,743.00.**

SEDC will provide services to match funds that include grant administration, technology training, data analysis services, technology consultation and network services. Specifically, SEDC's technology trainer will be the grant administrator at a cost of $20,000 (1/4 of her salary), the tech trainer and coordinator will give technology training at $40,000 (1/4 of both salaries), the data assessment will provide services at $20,000 (1/4 of her salary) and $20,000 for networking services (1/4 of the network engineer's salary). **SEDC's contributions total $80,000.**

EETT grant funds will provide food and drinks for the train-the-trainer session ($16 times 12 trainers) for a total of $960. The grant will also provide payment for teachers for three follow-up training days throughout the year for each of the schools. SEDC technology team will provide this training at no cost, EETT grant funds will be used to **pay teachers for attending the training and for meals for a total cost of $63,816.00** (24 hours at $25.00 per hour for 97 teachers/administrators, $16.00 a day for meals and snacks per person). The training will focus directly on integrating technology into the *Classroom Instruction that Works*. It will provide hands-on time for teachers to implement what they learned in the McREL workshops using their own equipment in their own classrooms.

EETT grant funds also include indirect costs of 2.45% for a total of $3,713 and 5% for USOE grant evaluation total of $28,694.00.

Total for Requested EETT Funds: $606,300.00

Total District Matching Funds: $467,875.00

Percent of Matching Funds: 77%

Percentage of EETT funds used for Professional Development: 25%

Budget Narrative Year Two:

Year two funding will be similar to year one but with the addition of four new schools, Diamond Valley Elementary in Washington District, Beaver High in Beaver District, Fiddlers Elementary in Iron District, and Valley High in Kane District. For more details regarding the budget of year two, see the narrative in Appendix J.

Requested EETT Grant Funds

Please see attached zipped file

Please also supply a USOE Budget form detailing the EETT grant fund expenditure categories and amounts. The Budget form is available at: http://www.usoe.k12.ut.us/curr/nclb/xls/NCLBbudgtemp.xls

References

Marzano, R. J, Pickering, D. J., Pollock, J. E. (2001). *Classroom instruction that works: Researched-based strategies for increasing student achievement.* Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R.J. (1998). *A Theory-Based Meta-analysis of Research on Instruction.* Aurora, CA: Mid-continent Research for Education and Learning (ERIC Document Reproduction Service No. ED 427 087)

Pitler, H. (2004, Oct.). *McREL"S Rural Technology Initiative – Online Professional Development for Rural Schools.* Accepted for presentation at the National School Boards Association in Denver, CO.

Waters, J.T., Marzano, R.J., & McNulty, N.A. (2003). *Balanced Leadership: What 30 Years of Research Tells Us about the Effect of Leadership in Student Achievement.* Aurora, CO: Mid-continent Research for Education and Learning. Retrieved December 30, 2004, from http://www.mcrel.org/topics/productDetail.asp?topcisID=7&productID=144

Appendix A

List of participating school(s) by LEA, Title I poverty percentage, rationale for selection, and number of teachers to receive professional development.

LEA	School	Title I poverty percentage	Rationale for selection	Number of teachers to receive PD
Beaver	Beaver High	37 %	High technology need	23
Beaver	Milford High	41%	Poverty	13
Iron	Parowan High	30%	High technology need	23
Iron	Fiddlers Canyon El.	39%	High technology need	21
Kane	Kanab High	27%	High technology need	21
Kane	Valley High	41%	Poverty	11
Washington	Dixie Downs El.	60%	Poverty	26
Washington	Diamond Valley El.	21%	High technology need	18

Appendix B

Letters of commitment from grant partners:
See attached zipped file: **r2r los**

Appendix C

100% of EETT flow-through funds used for integrating technology verified by copy of Title II Part D budget for each LEA: **Print outs given to Kathy Webb, 1-28-05**

Appendix D

FIGURE 1
Categories of Instructional Strategies That Affect Student Achievement

Category	Percentile Gain
Identifying similarities and differences	45
Summarizing and note-taking	34
Reinforcing effort and providing recognition	29
Homework and practice	28
Nonlinguistic representations	27
Cooperative learning	27
Setting objectives and providing feedback	23
Generating and testing hypotheses	23
Questions cues and advance organizers	22

Appendix E

FIGURE 2	
Responsibility	**Associated Practices**
Affirmation	• Systematically and fairly recognizes and celebrates accomplishments of teachers and staff • Systematically and fairly recognizes and celebrates accomplishment of students • Systematically and fairly acknowledges failures and celebrates accomplishments of the school
Change agent	• Consciously challenges the status quo • Is comfortable leading change initiatives with uncertain outcomes • Systematically considers new and better ways of doing things
Communication	• Is easily accessible to teachers and staff • Develops effective means for teachers and staff to communicate with one another • Maintains open and effective lines of communication with teachers and staff
Contingent Rewards	• Recognizes individuals who excel • Uses performance v. seniority as the primary criterion for reward and advancement • Uses hard work and results as the basis for reward and recognition
Culture	• Promotes cooperation among teachers and staff • Promotes a sense of well-being • Promotes cohesion among teachers and staff • Develops an understanding of purpose • Develops a shared vision of what the school could be like
Curriculum, Instruction, assessment	• Is involved with teachers in designing curricular activities and addressing instructional issues in their classrooms • Is involved with teachers to address assessment issues
Discipline	• Protects instructional time from interruptions • Protects/shelters teachers from distractions
Flexibility	• Is comfortable with major changes in how things are done • Encourages people to express opinions that may be contrary to those held by individuals in positions of authority • Adapts leadership style to needs of specific situations • Can be directive or non-directive as the situation warrants
Focus	• Establishes high, concrete goals and the expectation that all students will meet them • Establishes high, concrete goals for all curricula, instruction, and assessment • Establishes high, concrete goals for the general functioning o the school • Keeps everyone's attention focused on established goals
Ideas/beliefs	• Holds strong professional ideals and beliefs about schooling, teaching and learning • Shares ideals and beliefs about schooling, teaching, and learning with teachers, staff and parents • Demonstrates behaviors that are consistent with ideas and beliefs
Input	• Provides opportunities for input from teachers and staff on all important decisions • Provides opportunities for teachers and staff to be involved in policy development

	• Involves the school leadership team in decision making
Intellectual stimulation	• Stays informed about current research and theory regarding effective school practices • Continually exposes teachers and staff to cutting edge ideas about how to be effective • Systematically engages teachers and staff in discussions about current research and theory • Continually involves teachers and staff in reading articles and books about effective practices
Knowledge of curriculum, instruction assessment	• Is knowledgeable about curriculum and instructional practices • Is knowledgeable about assessment practices • Provides conceptual guidance for teachers regarding effective classroom practice
Monitors/evaluates	• Monitors and evaluates the effectiveness of the curriculum • Monitors and evaluates the effectiveness of instruction • Monitors and evaluates the effectiveness of assessment
Optimizer	• Inspires teachers and staff to accomplish things that might seem beyond their grasp • Portrays a positive attitude about the ability of teachers and staff to accomplish substantial achievements • Is a driving force behind major initiatives
Order	• Provides and enforces clear structures, rules, and procedures for teachers, staff, and students • Establishes routines regarding the running of the school that teachers and staff understand and follow • Ensures that the school is in compliance with district and state mandates
Outreach	• Advocates on behalf of the school in the community • Interacts with parents in ways that enhance their support to the school • Ensures that the central office is aware of the school's accomplishments
Relationships	• Remains aware of personal needs of teachers and staff • Maintains personal relationships with teachers and staff • Is informed about significant personal issues in the lives of teachers and staff • Acknowledges significant events in the lives of teachers and staff
Resources	• Ensures that teachers and staff have necessary materials and equipment • Ensures that teachers have necessary professional development opportunities that directly enhance their teaching
Situational awareness	• Is aware of informal groups and relationships among teachers and staff • Is aware of issues in the school that have not surfaced but could create discord • Can predict what could go wrong from day to day
Visibility	• Makes systematic and frequent visits to classrooms • Is highly visible around the school • Has frequent contact with students

Appendix F

FIGURE 3
Rural Technology Initiative Methods and Data Collection

Methods

- A face-to face orientation meeting of school representatives (an administrator and one teacher from each school) and McREL RTI staff developers
- Monthly 60-minute online video conference class for teachers and administrators using *Classroom Instruction that Works: Research-based Strategies for Increasing Student Achievement and technology applications*; includes live chat room for informal synchronous teacher discussions
- Monthly facilitated online 60-minute teacher discussion groups on integrating technology with the instructional strategies taught in the online class
- Monthly 60-minute online video conference class and discussion for administrators
- Asynchronous threaded online teacher discussions in response to facilitator prompts
- Monthly assignments for both teachers and administrators
- Lesson plans developed based on monthly class posted online by each school

Data Collection

- Pre/post-surveys of teachers' instructional practices, technological savvy, perceptions of teaching efficacy, motivation for teaching, and principal leadership
- Pre/post-surveys of administrators' technological savvy and perceptions of the degree to which they implement various leadership practices
- Surveys and interviews of treatment teachers and administrators on school environment and teacher professional community
- Documentation of teachers' and administrators' participation in the RTI professional development activities
- Content of online teacher discussions
- Classroom observations of instructional practice
- Teacher retention data
- Student achievement data

Appendix G
Administrators' Survey
See attached zipped file: **Appendix G**

Appendix H
Teachers' Survey
See attached zipped file: **Appendix H**

Appendix I

Budget Narrative Year Two.

Year two funding will be similar to year one but we will be adding four new schools. The schools are Diamond Valley Elementary in Washington District, Beaver High in Beaver District, Fiddlers Elementary in Iron District, and Valley High in Kane District. Each of these purchases are necessary to support the R2R project which effectively integrates technology into the curriculum and increases students' access to technology.

Beaver High School-Beaver District EETT Grant Funds will purchase 9 teacher Sony VPLCX20 ceiling mount projectors at $1843.00 for a total of $16,587.00. 17 Sony Vaio VGNA230 Notebook Computers at $1,600.00 each for a total of $27,200.00. 8 Wireless Access Points throughout the school for a total of $4400.00. **Total of requested EETT Grant funds for Beaver High School: $48,187.00.** Beaver High School-Beaver District plans to match funds by providing 77 existing teacher computers and lab machines at $875.00 each for a total of $67,375.00, furniture for computers labs for a total of $8000.00, technology support and installation of the student labs throughout the school year for $4,000.00, installation of the wiring for the schools Local Area Network for a total of $7000.00, custodial support which includes power, heating, cooling and janitorial support for the computer lab for a total cost of $2000.00, time and/or reimbursement for the teachers and principal professional, 2 hours of professional development a month for 9 months for teachers at $25.00 per hours for a total of $5,400.00, and a PolyCom video conferencing unit for the monthly collaboration training for a total cost of $3,500.00. **Total matching funds for Beaver High School*:* $105,971.00**

Fiddlers Elementary School-Iron District EETT Grant Funds will purchase, 25 eMac 1.25 Ghz student lab computers at $816.00 each for a total of $20,400.00, *Microsoft Office* and *Inspiration* software for the lab computers for a total of $2801.60, 17 teacher Sony VPLCX20 ceiling mount projectors at $1843.00 for a total of $31,331.00, 17 eMac 1.25Ghz teacher computers at $816.00 for a total of $13,872.00. **Total of requested EETT Grant funds for Fiddlers Canyon Elementary School: $68,404.00.** Fiddlers Elementary School-Iron District plans to match funds by providing, furniture for computers labs for a total of $5,075.00, technology support and installation of the student labs, projectors and teacher computers throughout the school year at $10,500, custodial support for the lab for a total cost of $2100.00, room for the computer lab measuring 1050 square feet at $2.50 per foot per month for 10 months for a total of $26,250.00, time and/or reimbursement for the teacher and principal professional development, 2 hours of professional development a month for 9 months at $25.00 per hour for a total of $11,250.00, and a PolyCom video conferencing unit for the monthly collaboration training for a total cost of $3,500.00. **Total matching funds for Fiddlers Elementary School: $77,479.00**

Diamond Valley Elementary School-Washington District EETT Grant Funds will purchase and install 17 teacher Sony VPLCX20 ceiling-mount projectors at $1843.00 for a total of $31,331.00, 25 Sony Vaio VGNA230 Notebook Computers with *Microsoft Office* and *Kidspriation* at $1,600.00 each for a total of $40,000.00, one computer cart with wireless access points which allow the notebook computers to be moved easily from classroom to classroom at $4,495.00. **Total of requested EETT Grant funds for Diamond Valley Elementary School: $75,743.00.** Diamond Valley Elementary School-Washington District plans to match funds by providing, 25 Teacher Computers at $875.00 for a total of $22,500.00, technology support and installation for the mobile labs throughout the school year $7,000.00, installation of the wiring for the schools Local Area Network for a total of $13,840.00, custodial support for the mobile lab for a total cost of $2000.00 for the year, time and/or reimbursement for the teacher and principal professional development. This includes 52 hours for the 24 teachers at $41.70 per hour and 94 hours for the principal at $41.70 per hour for a total of $56,550.78. Also, the district will dedicate a full-time person to provide hands-on professional development in the school for the year at a cost of $41,283.00, and a PolyCom video conferencing unit for the monthly collaboration training for a total cost of $3,500.00. **Total matching funds for Diamond Valley Elementary School: $146,667.00**

Valley High School-Kane District EETT Grant Funds will purchase and install 11 teacher Sony VPLCX20 ceiling mount projectors at $1843.00 for a total of $20,273.00, 24 Sony Vaio VGNA230 Notebook Computers with *Microsoft Office* and *Inspiration* at $1,600.00 each for a total of $38,400.00). **Total of requested EETT Grant funds for Valley High School: $58,673.00**. Valley High School-Kane District plans to match funds by providing a network infrastructure re-design at a cost of $20,000.00, wiring for the schools Local Area Network, this includes the category 6 wiring, faces plates, and patch panels for a cost of $7,000.00, 15 Lab Machines at $465.00 each for a total of $6,975.00, furniture for computers labs for a total of $8000.00, technology support

and installation of the student labs throughout the school year at $4,000.00, custodial support for the lab for a total cost of $2000.00 for the year, time and/or reimbursement for the teacher and principal professional development at $14,112 plus 23% for benefits that total $3246.00 for the quality days, 2 hours of professional development a month for 9 months at $25.00 per hours for a total of $108,00.00 (total for teacher professional development is $28,158.00), and a PolyCom video conferencing unit for the monthly collaboration training for a total cost of $3500.00. **Total Matching funds for Valley High School: $79.633.00**

Mid-Continent Research for Education and Learning (McREL) EETT Grant Funds. McREL will provide personnel wages, travel, data collection instruments, web resources for NCREL to provide training for five days on site and the follow-up training and support for the teachers and principals through out the year. The total cost is **$87,743.00.**

SEDC will provide services to match funds that include grant administration, technology training, data analysis services, technology consultation and network services. Specifically, SEDC's technology trainer will be the grant administrator at a cost of $20,000 (1/4 of her salary), the tech trainer and coordinator will give technology training at $40,000 (1/4 of both salaries), the data assessment will provide services at $20,000 (1/4 of her salary) and $20,000 for networking services (1/4 of the network engineer's salary). **SEDC's contributions total $80,000.**

EETT grant funds also include indirect costs of 2.45% for a total of $3,713 and 5% for USOE grant evaluation total of $20,0925.00.

Total Requested EETT Funds: $425,650.00

Total District Matching Funds: $467,875.00

Percent of Matching Funds: 102%

Percentage of EETT funds used for Professional Development: 36%

Percentage of Budget Reducation for First Year: 30%

The application must be submitted no later than midnight on January 31, 2005, to both program contacts via e-mail. (Coversheet and letters may be attached as PDFs or be faxed.)

Program Contacts:
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